

Summary of Public Submissions Received on

NPRM 18-01 — Aircraft Emergency Location Equipment

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General

Notice of Proposed Rule Making (NPRM) 18-01 was issued for public consultation on 04 September 2017, with a submission close-off of 02 October 2017. The purpose of NPRM 18-01 was to:

- establish a performance-based regulatory framework for aircraft emergency location equipment for installation in New Zealand registered aircraft operating within the New Zealand Flight Information Region. It proposes the removal of the prescriptive requirement for one type of emergency location transmitter (ELT) technology and gives the Director of Civil Aviation the discretion to approve equipment that meets specified performance criteria set in the rule.
- in addition, to adopt part of International Civil Aviation Organization (ICAO) Amendment 40 to Annex 6 Part I *Operation of Aircraft* relating to carriage of ELTs.

A copy of the NPRM was sent to:

- · The Ministry of Transport
- Internal CAA stakeholders
- The CAA Aircraft Emergency Location System (AELS) Rules Drafting Group

The NPRM was published on the CAA website on 04 September 2017, notified in the New Zealand Gazette on 7 September 2017, and notified to the industry by automatic email alerts.

Summary of Submissions

Breakdown

A total of nine submissions were received. Of these, two submissions were from individuals, and seven were from organisations. Five submissions stated the proposal is not acceptable under any circumstances, two stated the proposal is not acceptable but would be acceptable if changes were made, and two stated the proposal is acceptable but would be improved if changes were made.

The submissions covered the following subjects:

- Use of CAA notices
- Fines and fees
- Specifications and installation requirements
- ELT activation data
- the 100 hour check and 24 month test.
- the number of ELTs to be carried

Part 91 A.15 and Rule 129.109(b)(5)

Submissions

Fines and Fees

A submitter objected to the addition of an appendix to include fines and fees into Part 91 "as this takes them out of the Civil Aviation Act and allows the CAA to issue fines without having to go through due process." The submitter stated "fines and fees must remain in the Civil Aviation Act and all references to Part 91 must be removed or clarification that the table is from the Civil Aviation Act".

CAA Response

There are no fines or fees included in Part 91. Fines and fees in respect of breaches against Civil Aviation Rules are contained in a separate legislative instrument known as the Civil Aviation (Offences) Regulations. Under section 100 of the Civil Aviation Act, the Governor-General may make regulations for certain matters specified in that section, such as prescribing offences and penalties. In this regard, the CAA does not 'make' the fees and fines, but puts forward recommendations for the setting of fines and fees in respect of any new proposed rules.

When a new or amended Civil Aviation Rule is developed, the CAA includes any proposed amendments to the Civil Aviation (Offences) Regulations as an Appendix to the NPRM, for consultation purposes only. The amount for fines and fees proposed are usually based on the risk involved with non-compliance of the proposed rule, and commensurate with the amount for other similar offences. The proposed fines and fees are then subject to the same consultation process as the proposed rules. Following this consultation process the proposed fines and fees are forwarded to the Ministry of Transport and the Ministry of Justice for final processing. In the case of this NPRM, the only change made to the existing fines and fees was to include the provision for an AELS in the relevant rules.

Specifications and Installation Requirements

A submitter "disagreed with putting specifications in rule 91.529(ab) as it is inconsistent with other parts of Part 91". The submitter considered that "in general rules should give installation requirements for equipment, and the specifications for that equipment should be outside the main rule part." In addition, the submitter suggested having the standards in an NZTSO.

Five submitters stressed the importance of correct installation for ELTs in order for them to operate in an accident, in particular, a slow rollover in a helicopter. Also, the submissions specifically mentioned the incorrect installation of ARTEX ELTs in helicopters and questioned why there has never been an AD sent out to check the initial installations.

CAA Response

The CAA notes the comment relating to developing a NZTSO but has no current plans to do so, as this would involve moving away from performance-based rule making and being able to recognise other States' standards. Given the issues in respect to installation of ELTs, the CAA view is that installation requirements be taken out of the rule and dealt with through guidance material in advisory circulars together with the manufacturer's recommendations. This gives the CAA flexibility in developing guidance material to suit the equipment and the different aircraft types that it will be installed in.

The submissions received relating to the incorrect installation of ARTEX ELTs on helicopters have been correlated into an Aviation Related Concern (ARC). This ARC will enable investigation of the concerns raised and may lead to an Airworthiness Directive if sufficient supporting evidence is discovered.

ELT activation data

Five submitters claimed that "the data collected by the CAA with regard to ELT activations and used to support this NPRM is incomplete and flawed, despite constant reminders and corrections." The submitters claimed that "over the last 12 months the accident statistics provided by the CAA showed only one activation out of 17, while on corrected data supplied by [a submitter] with assistance from RCCNZ, eight out of 17 had actually worked". Also, "the trouble with CAA and TAIC research data is that it has always been about the cause of the accident and has never been focused on data like where and how was the ELT installed, type of ELT, antenna etc". The submitters expressed the view that "because this NPRM is based on flawed data the proposal is 5 years too soon to be considered, and should not be considered until an AD is put out to check all 406 MHz ELT installations are installed in the correct manner".

CAA Response

The data held by CAA represents the instances in which the CAA was notified of an ELT signal, and is not a record of ELT failure. The discrepancy between ELT operation and ELT signal recorded is well known and the CAA has made several attempts to backfill the data (including assisting a submitter to do so). In each case we have ended up with a similar result to that submitted, i.e. the ELT functions correctly in slightly less than half the accidents. This low success rate is of concern to CAA, and it is this less than 50% success figure that one of the rules issues in the NPRM is based on.

Key factors behind this NPRM include converting the existing rules from prescriptive-based rules into performance-based rules, revising and updating installation guidance material, and incorporating part of an ICAO amendment regarding carriage of ELTs. The issue of data related to ELT activation was just one source of information that CAA used as part of the policy and rule development process.

100 Hour Check and 24 Month Test

Five submitters complained about the requirement in rule 91.605(e)(4)(ii) that meant that a "24 month test as well as a 100 hour test is required for ELTs." They state "that most manufacturers do not require a 24 month test as part of the maintenance of a 406 MHz ELT, and that this requirement is related to the older TSO91 standards. What is now recommended by the manufacturers is a self-test by the operator once a month and it is not sensible to undertake a 24 month test as well as a 100 hour test. As the rule is 12 months or 100 hour then rule 91.605(e)(4)(ii) should be deleted and the CAA should clarify what it requires for the 406 MHz test".

CAA Response

The CAA agrees. Rule 91.605(e)(4)(ii) will be deleted. In general terms the CAA requires testing should be in accordance with the manufacturer's instructions. Guidance material will be included in the revision of advisory circulars currently being developed and drafts of the revised advisory circulars will be published on the CAA web site for comment.

Number of ELTs to be carried

A submitter stated that while the changes proposed for Part 129 align with the ICAO requirements, the proposals for Part 121 maintains the current status quo and requires the carriage of an additional ELT over and above the ICAO SARP.

CAA Response

The CAA disagrees that the proposal requires the carriage of an additional ELT. The current Part 121 rule requires the carriage of three ELTs and the Part 121 proposal allows for a reduction of one ELT if the option of having the capability to autonomously transmit position information is adopted. This aligns as far as practicable with the ICAO SARP.

Part 91 A.15 and Rule 129.109(b)(5

A submitter suggested that Part 91 Appendix A.15(a)(1) and rule 129.109(b)(5)(i) be amended to read "be TSO-C126 approved". This would give a clear expectation and requirement that the ELT shall be TSO approved. The submitter also considered the wording in rule 129.109(b)(5)(ii) and (iii) to be vague and uncertain and does not provide the operator sufficient information as what an alternative to TSO-C126 would entail.

CAA Response

The CAA considered the suggested change of 'be TSO-C126 approved'. However, to comply with our Certification Unit procedures the suggested change is not accepted but the wording will be changed to read 'be TSO-C126 certified'. In regard to the suggested change in rule 129.109(b)(5)(ii) and (iii), the CAA is adopting performance-based regulations and is thus moving away from prescriptive rules where possible. The intent of the wording in this rule is to "future-proof" it against future ICAO changes to their standards and frequencies by avoiding the use of prescriptive text. This will provide some flexibility for future rulemaking.

Use of Notices

One submitter "disliked the concept of a CAA notice as the Act refers to ordinary rules and the submitter did not see how a CAA notice can be an ordinary rule". The submitter also "did not see the need for a CAA notice as any rule has to be amended to introduce the notice so it seems unnecessary. Although some may think it is quicker to amend a notice rather than a rule, the submitter considered it better to draft a rule in a general way and then have an advisory circular giving a more detailed explanation of means of compliance with the rule". In addition, the submitter "considered this NPRM an inappropriate use of a CAA notice as the notice may have to list specific brands rather than system types." The submitter considered "the Director should not be approving a particular brand, the company producing the AELS may not want its specifications published, and it certainly should not be listed in a CAA notice".

Another submitter wanted "all references to CAA notices to be removed." The submitter considered the "NPRM to be a underhanded method to get notices ratified as a legal document under the guise of emergency location equipment". The submitter stated that "notices should be laid out in a separate NPRM."

CAA Response

A CAA notice is not a substitute for an ordinary rule. The Minister's power to make ordinary rules remains with the Minister under Sections 28 to 30 of the Civil Aviation Act. The term 'CAA notice' is a generic phrase for a determination, requirement, or condition imposed by the Director issued under a rule made under section 28(5) of the Act.

Section 28(5) of the Act enables the Minister of Transport to make ordinary rules that empower the Director, the Authority, or any other person to issue approvals, determinations, requirements, conditions or procedures for purposes specified in the rule. The use of CAA notices is simply one tool for exercising this existing power. This legislation was introduced in 2010 to allow the aviation regulatory framework to better meet the demands and challenges of the fast-changing aviation sector, in particular to facilitate development of performance-based rules and to enable aviation regulation to be more responsive to changes in technology. The CAA will consult on new and amended CAA notices, similar to new and amended rules.

The notice will be part of the Notice of Proposed Rule Making (NPRM) process – including consultation. Notices will be readily and freely available for public access and will be published on the CAA website.

In the case of this NPRM, the Minister's enabling rule is 91.529(a) which sets out the high-level requirement that empowers the Director to issue a notice of approval that will meet the specific performance details in rule 91.529(ab). In this case, the notice will contain a list of systems -not brand names- that meet the performance requirements of rule 91.529(ab). As a new system is approved by the Director it will be added to the list in the notice, following consultation. There will be no need to amend the enabling rule.

More information on CAA Notices is published on the CAA website: http://www.caa.govt.nz/rules/civil-aviation-rules/